

## SKYROVER S1

# SKYROVER S1 Mini Drone User Manual

Model: S1

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your SKYROVER S1 Mini Drone. Please read this manual thoroughly before using the product to ensure proper setup, flight, and maintenance. The SKYROVER S1 is an ultra-lightweight drone designed for portability and high-quality aerial photography, featuring a 4K/60fps camera with 3-axis gimbal stabilization, extended flight time, and advanced intelligent flight modes.

Video 1: SKYROVER S1 Drone Introduction. This video provides a general overview of the drone's features and design.

## 2. PACKAGE CONTENTS

Verify that all items are present in your product package:

- SKYROVER S1 Mini Drone x 1
- SKYROVER Basic Remote Controller x 1
- SKYROVER S1 Smart Flight Battery x 1
- SKYROVER S1 Gimbal Lock x 1
- SKYROVER S1 Propeller pair x 3
- Propeller Screw x 6
- USB-C Data Cable x 1
- Lightning Adapter Cable x 1
- Type-C Adapter Cable x 1
- User Manual x 1



Image 1: SKYROVER S1 Mini Drone and Basic Remote Controller.

### 3. PRODUCT OVERVIEW

#### 3.1 Key Features

- **Ultra-Lightweight Design:** Weighs under 249g, making it travel-friendly and exempt from registration requirements in many regions.
- **High-Resolution Camera:** Captures 4K/60fps video and 12MP photos with a 1/2" Sony CMOS sensor for clear and detailed imagery.
- **3-Axis Gimbal Stabilization:** Ensures smooth, shake-free footage even in dynamic flight conditions.
- **Extended Flight Time:** Up to 40 minutes of flight per battery, with bundles offering up to 120 minutes with multiple batteries.
- **Long Video Transmission:** Provides up to 39,000 ft (approximately 12 km) of stable video transmission for real-time HD views.
- **Intelligent Flight Modes:** Includes Auto Track for subject locking, SmartGo for one-tap cinematic shots, and Smart Return-to-Home (RTH).

- **1/2" Sony Sensor,  
Pro-Level Clarity**

Capture 12MP photos, 4K/60fps videos with a 1/2" Sony sensor for sharp clarity.



Image 2: The drone's 1/2 inch Sony CMOS sensor for 4K/60fps video and 12MP photos.

- **3-Axis Gimbal,  
Ultra Stabilization**

Start your adventure with a single tap.

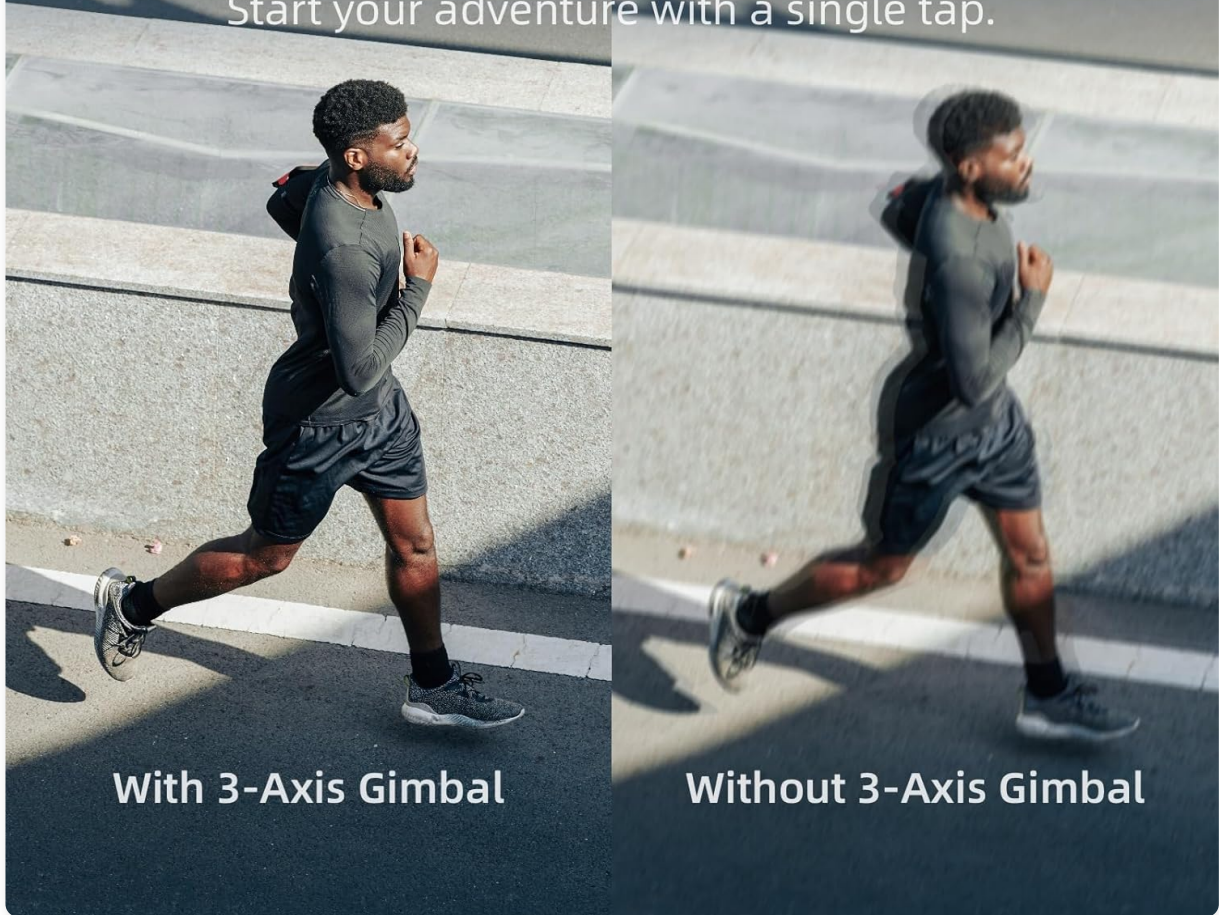


Image 3: Visual comparison of footage with and without 3-axis gimbal stabilization.

## 4. SETUP

### 4.1 Drone Preparation

1. **Unfold the Drone:** Gently unfold the front arms first, then the rear arms. Ensure they lock into place.
2. **Install Battery:** Insert the Smart Flight Battery into the drone until it clicks securely.
3. **Remove Gimbal Lock:** Carefully remove the gimbal lock from the camera.
4. **Insert MicroSD Card:** Insert a compatible microSD card (up to 128GB recommended) into the designated slot on the drone.



Image 4: The SKYROVER S1 Mini Drone in its unfolded state.

## 4.2 Remote Controller Setup

1. **Attach Control Sticks:** Screw the control sticks into the remote controller.
2. **Mount Smartphone:** Extend the phone holder and securely place your smartphone.
3. **Connect Smartphone:** Use the appropriate data cable (USB-C, Lightning, or Type-C) to connect your smartphone to the remote controller.

## 4.3 App Installation & Connection

1. **Download App:** Scan the QR code on the packaging or search for the "SKYROVER" app in your smartphone's app store.
2. **Power On:** Press the drone's power button once, then press again and hold to power on. Do the same for the remote controller.
3. **Connect:** Open the SKYROVER app. The app should automatically detect and connect to the drone. Follow any on-screen prompts for initial setup or firmware updates.

Video 2: Introduction to using the SKYROVER S1 drone with camera. This video guides you through the initial setup and connection process.

# 5. OPERATING

## 5.1 Pre-Flight Checks

- Ensure batteries for both drone and remote controller are fully charged.
- Check propellers for any damage and ensure they are securely attached.
- Verify the microSD card is inserted correctly.
- Perform compass calibration if prompted by the app or if flying in a new location.
- Set the Return-to-Home (RTH) altitude in the app to be above the highest nearby structures or obstacles.

## 5.2 Takeoff and Landing

1. **Place Drone:** Place the drone on a level, open ground with the back end facing you and the camera facing away.
2. **Automatic Takeoff:** In the app, tap the "Take Off" button. The drone will automatically ascend to a preset altitude.
3. **Automatic Landing:** In the app, tap the "Land" button. The drone will automatically descend and land.

# • One-Tap Takeoff and Landing

Start your adventure with a single tap.



Image 5: One-Tap Takeoff and Landing feature for easy flight initiation.

## 5.3 Flight Controls

Use the remote controller joysticks to maneuver the drone:

- **Left Stick:** Controls altitude (up/down) and yaw (rotate left/right).
- **Right Stick:** Controls forward/backward movement and left/right strafing.
- **Flight Pause Button:** Press once to brake and hover the drone in place.

## 5.4 Camera Operation

- **Shutter/Record Button:** Press once on the remote to take a photo or to start/stop recording video.
- **Gimbal Dial:** Use the gimbal dial on the remote controller to control the tilt of the camera.
- **Digital Zoom:** Hold the FN button and turn the gimbal dial to zoom in or out (up to 4x digital zoom in 1080p video mode).

## • 39,000 ft\* Video Transmission

Stay connected and see in real-time HD,  
wherever you go.



Image 6: Real-time HD video transmission up to 39,000 ft.

### 5.5 Intelligent Flight Modes

Access these modes via the SKYROVER app:

- **Auto Track:** The drone automatically follows a selected subject, keeping it centered in the frame.
- **SmartGo:** Offers various pre-programmed cinematic flight paths (e.g., Loop, Lift, Arc, Vista, Twist) for professional-looking shots with a single tap.
- **Smart Return-to-Home (RTH):** If the battery is low or the control signal is lost, the drone will automatically return to its takeoff point. This can also be manually activated.

## • Always Centered

Auto Track follows you and keeps you centered, whether you walk, run, or ride.



Image 7: Auto Track feature keeps subjects centered during movement.

## 6. MAINTENANCE

### 6.1 Propeller Replacement

If propellers are damaged, replace them immediately. Always replace propellers in matched pairs (e.g., both front propellers). Use the provided screwdriver and new screws for replacement. Do not reuse old screws as they may have weakened thread-locking adhesive.

### 6.2 Battery Care

- Always fully charge batteries before first use to activate them and ensure full capacity.
- Use the provided charging hub for efficient charging of multiple batteries.
- Store batteries in a cool, dry place away from direct sunlight.

### 6.3 Cleaning

Use a soft, dry cloth to clean the drone body and camera lens. Avoid using liquid cleaners or solvents.

## 7. TROUBLESHOOTING

- **Drone not powering on:** Ensure the battery is fully charged and correctly inserted.

- **Remote controller not connecting:** Check the data cable connection to your smartphone and ensure both drone and remote are powered on. Restart the app and devices if necessary.
- **Poor video transmission:** Ensure you are within the specified transmission range and there are no major obstacles between the remote and the drone. Avoid areas with strong electromagnetic interference.
- **Unstable flight:** Perform compass calibration in the app. Check propellers for damage or incorrect installation. Ensure flying in suitable weather conditions (avoid strong winds).
- **Gimbal stuck/abnormal:** Ensure the gimbal lock was removed before powering on. Calibrate the gimbal via the app if issues persist.

## 8. SPECIFICATIONS

Feature	Detail
Brand	SKYROVER
Model	S1
Item Weight	249 Grams (under 249g)
Video Capture Resolution	4K/60fps
Effective Still Resolution	12 MP
Sensor	1/2 inch SONY CMOS
Gimbal	3-Axis Stabilization
Flight Time	Up to 40 minutes per battery
Video Transmission Range	Up to 39,000 ft (approx. 12 km)
Battery Capacity	2560 Milliamp Hours
Battery Cell Composition	Lithium Polymer
Product Dimensions	6.3"L x 3.8"W x 2.5"H
Skill Level	All

## 9. WARRANTY & SUPPORT

Your SKYROVER S1 Mini Drone comes with a 12-month warranty covering manufacturing defects. For timely customer service and after-sales support, please contact:

Email: [after-sales@skyroverdrone.com](mailto:after-sales@skyroverdrone.com)



Image 8: SKYROVER Support details, including warranty and contact information.